

## CLAIMS

What is claimed is:

- 1 1. A method comprising:
  - 2 retrieving state configuration information from a state server of a
  - 3 hardware/software co-simulation; and
  - 4 providing a client of the hardware/software co-simulation access to a server state
  - 5 of the state server based on the state configuration information.
- 1 2. The method of claim 1 wherein the state server defines an address space or a
- 2 virtual address space in the hardware/software co-simulation.
- 1 3. The method of claim 1 wherein the state configuration information comprises at least
- 2 one of symbol allocation and symbol type.
- 1 4. The method of claim 1 further comprising:
  - 2 registering the client with a co-simulation interface; and
  - 3 associating the client with at least one state server in the hardware/software co-
  - 4 simulation.
- 1 5. The method of claim 4 wherein registering the client comprises assigning the client a
- 2 client identifier.
- 1 6. The method of claim 4 wherein associating the client with at least one state server
- 2 comprises providing the client with a list of available state servers and one or more
- 3 address spaces associated with each of the available state server.



1 7. The method of claim 6 wherein said client is to retain an identifier for at least one  
2 address space from the list.

1 8. The method of claim 6 wherein said client is to return a selection from the list and  
2 wherein associating the client with at least one state server further comprises providing  
3 the client an identifier for at least one address space from the list based on the  
4 selection.

1 9. The method of claim 1 wherein the state server comprises an instruction set  
2 simulator (ISS) and a bus interface model (BIM).

1 10. The method of claim 1 further comprising:  
2 requesting the state configuration information, said state configuration  
3 information to define at least one memory location comprising the server state.

1 11. The method of claim 10 wherein requesting the state configuration information  
2 comprises:

3 receiving a client identifier for the client at a co-simulation interface;  
4 receiving an identifier for an address space at the co-simulation interface, said  
5 server state being within the address space; and  
6 issuing a request from the co-simulation interface, said request including the  
7 client identifier and the identifier for the address space.

12. The method of claim 11 wherein the request is to be serviced by the state server, said state sever to access a symbol table indicated by the identifier for the address space and to provide the state configuration information based on the symbol table.

13. The method of claim 11 where a path of the request comprises a hardware kernel, a bus interface module within a logic simulator, an interprocess connection, a co-simulation manager within a software kernel, an instruction set simulator, and a debugger.

14. The method of claim 1 wherein providing the client access comprises:

performing a memory operation on at least one memory location based on the state configuration information.

15. The method of claim 14 wherein performing the memory operation comprises at least one of:

reading the server state;

modifying the server state;

receiving the server state at a predetermined future time; and

receiving notification upon a predetermined action on the server state.

16. The method of claim 14 wherein performing the memory operation comprises:

generating a request for the memory operation, said request including a memory allocation from the state configuration information;

accessing a memory map; and



